Antidegradation Standards and Implementation Procedures- 327 IAC 2-1-2 through 327 IAC 2-1-2.4

Comments: Cedar Creek should not be changed from an outstanding state resource water to an outstanding historical state resource water because the longstanding highest water quality status held by Cedar Creek would be abandoned, subjecting the stream reaches and tributaries to new and increased pollution allowances, and forcing Cedar Creek to reapply for its existing high standing and uses. (Acres)

Response:

Comment: The Tier 1 antidegradation standard needs to be modified to include situations where a designated use is different than an existing use. The words "and/or any designated uses" should be added after "all existing uses." (AEP, IKEC) *Response:*

Comment: In addition to limited use waters, high quality waters, outstanding historical state resource waters (OHSRWs), outstanding state resource waters (OSRWs), and outstanding national resource waters (ONRWs), a designation is needed to include waters that meet the standards. (AEP, IKEC) *Response:*

Comment: The Tier 2.5 antidegradation standard for OHSRWs needs to be modified to accommodate for economic and social development outside the area in which the surface waters are located. (AEP, IKEC)

Response:

Comment: The Tier 2.9 antidegradation standard for OSRWs should not exclusively require dischargers to demonstrate that a proposed new or increased discharge will result in a net improvement of the water quality of the receiving water body. (AEP, IKEC) *Response:*

Comment: The proposed rules need to be revised to acknowledge federal regulations that require alternate thermal effluent limitations established under Section 316(a) of the Clean Water Act to apply to OSRWs and ONRWs. (AEP, Cinergy, IKEC) *Response*:

Comment: We support the non-bioaccumulative chemicals of concern (non-BCC) antidegradation exemptions for new or improved monitoring data, analytical methods, water quality criteria, and effluent limitation guidelines. These exemptions should also be allowed for bioaccumulative chemicals of concern (BCCs). (AEP, IKEC) *Response:*

Comment: We support the non-BCC antidegradation exemption allowing new or increased discharges necessary to achieve reductions in air emissions. (AEP, IKEC) *Response:*

Comment: The special designation of the Indiana Dunes National Lakeshore as an outstanding historical state resource water does not specify a specific water body or stream segment. It also does not recognize any unique features of the water bodies affected. This designation has been assigned without any real evaluation of the water quality, biological quality, or aesthetics of the water body. For example, the East Branch of the Little Calumet River has historically poor quality. Discharges by Bethlehem Steel Corporation have increased flow and lowered the temperature. This generic designation should not remain, especially since the size of the Dunes continues to grow. If the designation does remain, Bethlehem may choose not to donate land in the future so that, in order to preserve its future, it could reroute its discharge downstream of any park boundaries. (Beth)

Response:

Comment: The draft antidegradation procedures, especially those proposed for OSRWs, go well beyond the federal Great Lakes system water quality criteria and implementation procedures. If our refinery was subject to the proposed OSRW antidegradation procedures, which few if any of our competitors would be subject to, we may be required to install, at a significant disadvantage, treatment beyond that already required to meet the stringent, protective federal Great Lakes system regulations. (BP Amoco)

Response:

Comment: The rules impose an arbitrary two-mile rule for dealing with discharges to tributaries to specially designated waters. If the true objective of antidegradation is to prevent significant lowering of water quality to the outstanding water body, all direct and tributary dischargers must be subject to outstanding water body antidegradation requirements. (BP Amoco) *Response:*

Comment: The rules should provide a de minimus increase of five percent (5%) to seven and one half percent (7.5 %) for all non-BCCs discharged to OSRWs. A de minimus allowance would serve as a powerful incentive to employ state-of-the-art environmental control technology so that the new or increased discharge will be less than the de minimus level and therefore not require an antidegradation demonstration, along with the associated uncertainty and time required to secure the necessary permit or modification. (BP Amoco) *Response:*

Comment: The net improvement requirement for OSRWs is not defined, and therefore is not ascertainable. Rather than serve as a condition for approval, improvement should serve as an exemption to an antidegradation demonstration. (BP Amoco) *Response:*

Comment: The antidegradation rules for a water body that is already developed must allow for the possibility of new or increased discharges. A de minimus level of increased discharge should be allowed in any developed water body, regardless of its special designation. (Cerestar) *Response:*

Comment: Wildlife and outdoor recreation are important economic resources in southeastern Indiana. The Blue River alone generates millions in tourist dollars for the region. The idea of

removing the protections the Blue River's OSRW designation is fiscally as well as environmentally unsound. The population growth slated for these counties should be a call for tighter protections rather than fewer. (Coyte) *Response:*

Comment: The Indiana antidegradation policy should protect existing uses and designated uses; maintain the physical, biological, and chemical integrity of the state's waters; ensure that all reasonable alternatives to proposed new water pollution are fully considered; and protect outstanding water bodies from future degradation. (ELPC) *Response*:

Comment: The use of the term "tier" is this rule causes confusion. While that terminology is used by U.S. EPA in certain guidance documents, it does not help to use that term in the antidegradation rules, particularly as "tier" is used in totally unrelated contexts elsewhere in the rules. (ELPC)

Response:

Comment: To protect existing uses, it is not adequate merely to enforce water quality standards. Sensitive aquatic life, including endangered species, may be affected by pollutants at concentrations below some Indiana water quality standards. Moreover, the likelihood of occasional excursions above permitted discharge levels necessitates added protections where sensitive species are present. The following language should be added as a new clause to 327 IAC 2-1-2(a)(1):

"(C) Require that a biological analysis sufficient to assure compliance with water quality standards and protection of existing aquatic life and wildlife be performed for every proposed permit involving any new or increased discharge of any pollutant. For this analysis, a survey of biological, physical and chemical characteristics of the waters that may be affected by the discharge must be provided by the applicant in writing. Such a survey need not include collection of new data, but may be accomplished through a review of existing data if recent and complete data is available for the waters that may be affected by the proposed new or increased discharge. No permit shall be granted by the commissioner for a new or increased discharge if there is a significant risk that the new or increased discharge will adversely affect any indigenous aquatic life or other wildlife.

(ELPC)

Response:

Comment: 327 IAC 2-1-2.2 is rather confusing and allows major degradation of Indiana waters from new discharges or loadings of non-BCCs to evade antidegradation review. Subsection (b) requires some redrafting to make clear when an antidegradation demonstration will be needed for the various types of pollutants. It is unclear whether a new discharge must qualify under each of subdivisions (1) through (4) for an antidegradation demonstration to be necessary. If a pollutant must fall into each subdivision, the rule fails to protect Indiana waters. A water could be degraded almost down to the bare water quality standards by a series of new discharges that were less than the thresholds for requiring an antidegradation demonstration. (ELPC) *Response*:

Comment: For non-BCCs, the rule should require an antidegradation demonstration of some sort for all new or increased discharges unless the applicant shows the following:

- The affected waters do not contain rare or endangered species.
- The discharge would not use more than five percent (5%) of the remaining assimilative capacity of the affected waters.
- All the waters that may be affected by the new pollution remain at less than seventy percent (70%) of the total water quality standard value for each of the pollutants under consideration.
- The discharge does not include priority pollutants, known carcinogens, or hormone disrupting chemicals.
- The total capital cost of the project causing the new or expanded discharge is less than five million dollars (\$5,000,000), unless the discharge consists entirely of noncontact cooling water.

(ELPC)

Response:

Comment: The purpose of 327 IAC 2-1-2.2(e) is unclear. Are there obstacles to dischargers accepting lower limits than are legally required? (ELPC) *Response:*

Comment: No exemption from the requirement of making an antidegradation demonstration should be allow. Many of the exemptions from the antidegradation demonstration in 327 IAC 2-1-2.3 should instead constitute particular examples of situations where the demonstration might be found to have been met. (ELPC)

Response:

Comment: Regarding 327 IAC 2-1-2.3(c)(3), generally reasonably anticipated flow is used in permitting rather than design flow. Increased discharges of BCCs should not be allowed routinely into Indiana waters to allow dischargers to reach their plants' design flow capacity, particularly as design flow is subject to manipulation. (ELPC) *Response*:

Comment: In 327 IAC 2-1-2.3(d)(10)(A), it is unclear that the Clean Water Act allows for a tradeoff involving increased water pollution in exchange for a reduction in air pollution and it is unlikely that there are circumstances that such a tradeoff would be environmentally or legally acceptable. (ELPC)

Response:

Comment: By definition, it appears that the exceptions in 327 IAC 2-1-2.3(d)(12) and (13) could only apply to waters designated as ONRWs and these exceptions seem to eliminate any practical difference between ONRWs and OSRWs. It appears, then, that the exceptions contradict the OSRW and ONRW classification system. (ELPC) *Response*:

Comment: 327 IAC 2-1-2.4(g) should be rewritten to make clear that the commissioner may allow some but not all of the requested lowering of water quality based on a finding that there exist cost-effective measures to prevent some, but not all, of the proposed degradation. (ELPC)

Comment: Degradation of state waters must be considered a decrease in the value of the state resources, and as such, is an economic loss, not benefit, to the state and to the public. (ESC) Response:

Comment: IDEM has wisely recognized that there are opportunities and authorities for controlling nonpoint source pollution. This language need to be retained in order to make it clear that IDEM recognizes the authority and will use it insofar as possible. (ESC) *Response:*

Comment: The level of protection afforded to OSRWs is not equivalent to ONRWs. Antidegradation demonstrations in OSRWs need to meet the initial requirement of making a net improvement in the quality of the waters. (ESC) *Response:*

Comment: The ONRW designation is the only category of waters for which no new or additional discharges are allowed with no provisions for exceptions or demonstrating economic or social need. (ESC)

Response:

Comment: All Tier II classifications have numerous exceptions that, by rule, allow some degradation, even for BCCs. At the least, IDEM needs to remove the provisions that allow even routine operations that increase discharges of BCCs for more than short term, temporary increases. (ESC)

Response:

Comment: The rule is inconsistent in the way it treats tributaries of Tier 2 and Tier 3 waters. IDEM needs to make the two provisions the same. (ESC) Response:

Comment: In my professional opinion, IDEM must classify Lake Michigan as an ONRW because it is a unique international water body that is recognized in the treaty between the U.S. and Canada that established the International Joint Commission on the Great Lakes. (ESC) *Response:*

Comment: What justification does IDEM provide for the thresholds of one and one half (1.5) and three (3.0) milligrams per liter five-day carbonaceous biochemical oxygen demand (CBOD₅) increase for OSRWs and high quality waters or OHSRWs? These thresholds do not provide sufficiently protective standards for waters that are near the limits for CBOD₅. (ESC) *Response*:

Comment: The proposed thresholds for ammonia are too high by about two (2) times, and should be fifteen percent (15%) and seven and one half percent (7.5%) increase of the unused loading capacity. Ammonia is directly and immediately toxic, and forms by-products that are

toxic and more persistent that ammonia itself. Increases in ammonia also have the potential to increase atmospheric ammonia and contribute to excess atmospheric nitrogen. (ESC) *Response:*

Comment: There is no justification for treating waters inside and outside the Great Lakes Basin any differently with regard to the thresholds for non-BCCs. IDEM needs to provide some scientific rationale and justification for treating upstate and downstate waters differently. (ESC) *Response:*

Comment: The exemptions in clauses (C) and (D) in 327 IAC 2-1-2.3(c)(1) allow a facility to increase production hours or increase the rate of production. These should only apply if there is no increase in either mass or concentration of the BCC in question. The exemption should not allow increases in BCCs in the water body; these pollutants are toxic, persistent and accumulative within a highly protected water body. (ESC) *Response:*

Comment: In order to satisfy the exemption in 327 IAC 2-1-2.3(c)(3), the publicly owned treatment works (POTW) must not accept any increase in non-domestic sewage. (ESC) Response:

Comment: The exemption for response action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act in 327 IAC 2-1-2.3(c)(4) must state that the action has to have an approved and public noticed plan for preventing harm to human health or the environment, including degradation of water quality. (ESC) *Response*:

Comment: The exemption in 327 IAC 2-1-2.3(d)(10) allows increased water pollution on the excuse of meeting air emission requirements. This exemption is poor policy, provides no protection for the environment or human health, only serves to shift the medium that is being degraded and relieves the polluter from the requirements to make changes in facility operations that will eliminate or reduce the production of the pollutant in question. This provision has the potential to increase levels of a great many pollutants in Indiana waters and must be deleted. (ESC)

Response:

Comment: 327 IAC 2-1-2.4(b)(3) is an interesting requirement for the applicant to engage the interested public. It should require the applicant to notify the interested public, and then submit the documentation of what has been done. Documentation may include copies of letters sent, lists of recipients, private or public meetings held, newspaper notices, community advisory groups formed, etc. (ESC)

Response:

Comment: The economic impacts in 327 IAC 2-1-2.4(d)(2) must include an estimate of increased or maintained profits, executive salaries, management salaries, etc. This analysis has to indicate to the public which individuals or entities will financially benefit and by how much, from this degradation of the public resource. IDEM should add a subdivision (3) requiring information on the net costs to the public from the proposed degradation. Such costs shall be

shown over a period of not less than 50 years and shall include factors that contribute to economic losses from the proposed degradation, including the following:

- Financial loss to the local economy from diminished recreational use of the water body.
- Financial loss to the local economy from reduced secondary recreational expenditures.
- Financial loss to the state and local economy from damaged natural resources, both living and not.
- Cost of increased water treatment for drinking water.
- Direct and indirect cost to individuals from diminished subsistence fishing.
- Reduced tax revenues from degraded environmental quality.
- Cost of health care due to degraded water quality.
- Other direct or indirect financial costs resulting from the degradation.

(ESC)

Response:

Comment: The language in 327 IAC 2-1-2.4(f) should require that a public meeting be held. (ESC)

Response:

Comment: The provision in 327 IAC 2-1-2.4(g)(2) requiring a local government resolution is objectionable and needs to be removed. IDEM is abrogating responsibility to protect waters of the state and to conduct and oversee the technical analysis. This provision could be improved by adding language requiring the local unit of government to hold a public hearing on the matter and take public comment under consideration following a 30-day comment period. (ESC) Response:

Comment: The current rules designate a few OSRWs, including Lake Michigan and all waters of the Indiana Dunes National Lakeshore. Very few, if any, of our waters will qualify as OSRWs under the proposed special designation process. Instead of abandoning our historic priorities, legislators should ensure that these priorities are addressed in a meaningful and reasonable way. (Goettlich)

Response:

Comment: The current rules say that OSRWs are to be protected with no degradation. Industry representatives argue that this means no new or increased sources of pollution, an unreasonable policy that will restrict growth near OSRWs. However, no degradation does not have to mean no growth. We need a policy that allows flexibility but ensures that there are improvements in water quality, especially in these outstanding waters. (Goettlich) *Response:*

Comment: The use of tiers in the antidegradation standard, 327 IAC 2-1-2, is unclear and should be eliminated. The antidegradation standards should just refer to the type of water body, i.e., high quality waters, OSRWs, and ONRWs. (HEC) *Response:*

Comment: No exemptions should apply to OHSRWs and OSRWs. (HEC) *Response:*

Comment: No significant lowering of water quality should be allowed in OHSRWs. (HEC) *Response:*

Comment: No significant lowering of water quality should be allowed in OSRWs. This is inconsistent with 327 IAC 2-1-2(d)(3), which requires a demonstration of net improvement to the water quality. (HEC)

Response:

Comment: In the draft rule, IDEM is attempting to arbitrarily downgrade protection for OSRWs by creating a new category and calling them OHSRWs. This is unacceptable. The proposed OHSRW designation does not afford adequate protection to these waters and the standard for these waters is fraught with a list of exceptions. There should be no downgrading of specially designated waters. Indiana should not abandon historic priorities. Instead, IDEM should adopt a policy that leads to improvement of these specially designated waters. (HEC) *Response:*

Comment: The antidegradation implementation procedures for BCCs should also apply to endocrine disrupting chemicals. (HEC) *Response:*

Comment: In 327 IAC 2-1-2.2(b)(4)(A), the percent reduction in dissolved oxygen is not as relevant as the percent saturation. Allowing an increase of three (3) milligrams per liter CBOD₅ could be lethal in some instances. Instead, the language should indicate that a significant lowering of water quality occurs when dissolved oxygen is decreased to less than seventy-five percent (75%) saturation. (HEC) *Response*:

Comment: In 327 IAC 2-1-2.2(b)(4)(B) and (C), allowing a percent of unused loading capacity is a way of allowing huge new pollutant loadings to some water bodies that are already impaired. (HEC)

Response:

Comment: There should not be exemptions to the antidegradation demonstration requirements, especially for BCCs. Some of these activities may be acceptable if the discharger can demonstrate that there will be an overall improvement in water quality, but there must be a public antidegradation demonstration. (HEC) *Response*:

Comment: How will antidegradation be applied to tributaries of specially designated waters? (HEC)

Response:

Comment: The exemptions in 327 IAC 2-1-2.3(c) should be allowed only through a public antidegradation demonstration. Subdivisions (4), (6), and (7) should be allowed in specially designated waters only is there is a demonstration of overall improvement of water quality. (HEC)

Comment: 327 IAC 2-1-2.3(d)(2) should read "... new limits that are a result of **any of** the following:". (HEC)

Response:

Comment: How will the commissioner determine that the use of the chemicals to treat zebra mussels will not cause an adverse effect on human health, aquatic life, or wildlife? These substances should not be exempt from the definition of significant lowering. There are alternatives to molluscicides, including hot water, teflon coating, and physical alterations. (HEC)

Response:

Comment: The exemption for shifting pollutants from air to water should be deleted, because it is not necessarily an environmental improvement. (HEC) *Response:*

Comment: In 327 IAC 2-1-2.3(d)(13)(A), substituting one chemical for another is not acceptable unless there is evidence that a less toxic or less bioaccumulative substance is being substituted for a worse one. (HEC)

Response:

Comment: The definition of "sanitary waste" in 327 IAC 2-1-2.3(e) does not seem to be needed because the term does not seem to be used. (HEC) *Response*:

Comment: In 327 IAC 2-1-2.4(b)(2)(A), the word "cost-effective" should be deleted because it allows an applicant to supply IDEM with only selected information. Instead, IDEM should review all pollution prevention options and their associated costs, and make the determination about cost-effectiveness. While IDEM takes into account costs that industries may incur installing new pollution control equipment, IDEM has done little to look at the profits industries would make if they prevented the pollution in the first place. Also, IDEM has failed to take into account the costs of allowing pollution in terms of lost opportunities for fishing and recreation in and on the water, the impacts on the aquatic communities and wildlife, and the impacts on human health. The demonstration must attempt to estimate these costs. IDEM should include language to require the following:

- Identification of all users of the water body.
- An assessment of who benefits and by how much. This should include an assessment of the impact on tax revenues and tax expenditures for infrastructure, jobs gained and workers displaced, etc., over a period of at least fifty (50) years.
- An assessment of the likelihood that the substances in the proposed discharge have endocrine disrupting activity.
- As assessment of the impact of allowing pollution in terms of lost opportunity for recreation, fishing, aesthetics, tourism, etc., on aquatic communities.
- An assessment of costs associated with clean up in the case of failure incident. (HEC)

Comment: 327 IAC 2-1-2.4(b)(4) should say "if lowering of water quality is allowed." As written, it sounds as if lowering of the concentration is implied. (HEC) *Response*:

Comment: 327 IAC 2-1-2.4(f) should say that a public hearing shall be held. The second sentence should read "... risk to human health due to new or increased discharges of **carcinogens**, BCCs, **or endocrine disrupting substances**.". All of the information in the antidegradation demonstration should be made available to the public. (HEC) *Response*:

Comment: At 327 IAC 2-1-2.4(g), it is not clear whether subdivision (1)(B) or (2) carries more weight. It is unacceptable for local government resolutions to be required for antidegradation demonstration, special designations, use designations, or any other decisions relating to the level of protection of our waters. The state water rule is administered under the federal authority of the Clean Water Act. Local land use impacts water quality, but local government decisions must not be allowed to determine the level of protection that will be afforded waters of the state. IDEM should set standards and water use designations that protect waters, regardless of impact on local land use decisions. (HEC) *Response*:

Comment: The definition of significant lowering for BCCs is too stringent. A de minimus level should be used instead of any new or increased loading, as is proposed for non-BCCs. A ten percent (10%) increase in mass loading in the Great Lakes system and a fifteen (15%) increase outside the Great Lakes system should be used. (Hoosier) *Response:*

Comment: The definition of significant lowering for non-BCCs is too stringent. It should be increased from ten percent (10%) to twenty (20%) in the Great Lakes systems, and from fifteen (15%) to thirty (30%) outside the Great Lakes system. Water quality based effluent limitations and the reasonable potential to exceed evaluations will provide more than adequate protection of the environment from degradation. (Hoosier) *Response:*

Comment: A finding of significant lowering of water quality and consequently, the requirement to perform an antidegradation demonstration, should not be based on Tier II criteria. When only a few studies are available, the uncertainties and conservative assumptions within Tier II calculations are too large. An antidegradation demonstration should only be required when sufficient data exist for calculating a Tier I criterion. (BP Amoco, Hoosier) *Response:*

Comment: The proposal to use an increase of three (3) milligrams per liter of CBOD₅ for the determination of significant lowering for dissolved oxygen is too low. At least ten (10) milligrams per liter should be used. (Hoosier) *Response*:

Comment: An applicant should be allowed to submit the information regarding applicability of an exemption in 327 IAC 2-1-2.3(c) and (d) concurrent with applying for a facility construction permit or for a new, renewed, or modified control document. Some exemption decisions will be straightforward and the process involved in allowing an exemption should not unnecessarily slow work on a permit or control document. (Hoosier)

Response:

Comment: An applicant should be allowed to submit an antidegradation demonstration concurrent with applying for a facility construction permit or for a new, renewed, or modified control document. Some exemption decisions will be straightforward and the process involved in allowing an exemption should not unnecessarily slow work on a permit or control document. (Hoosier)

Response:

Comment: In 327 IAC 2-1-2.4(f), there should be no requirement for the commissioner to quantify the increased risk to human health due to new or increased discharges of BCCs in an antidegradation demonstration. By law, human health must be protected in NPDES permit limits. An attempt to quantify an increased risk may be beyond staff capabilities and may lead to unacceptable delays or to challenges to a decision. (Hoosier) *Response*:

Comment: In 327 IAC 2-1-2.4(h), a proposed for finalized antidegradation determination should not be placed into a draft or final permit. The fact sheet is the proper location of the determination. If this is placed in the NPDES permit, will a company be in violation of its permit if it does not reach a proposed employment level or if its payroll or tax payments are less than estimated? If IDEM wishes to place any portion of an antidegradation decision into a permit, it should only be the elements listed in 327 IAC 2-1-2.4(b)(1), (2)(A) and (B), (3) and (4). (Hoosier)

Response:

Comment: The terms "nonpoint source" and "nonpoint source discharge" used in the antidegradation standards for Tier 1 and Tier 2 waters are not defined. The specific inclusion of nonpoint authorities where they exist is vague and begs clarification. What is IDEM's authority with nonpoint source pollution? Is this rule conferring new authority? Regarding the Tier 2 standard, who makes the decisions about cost-effective and reasonable best management practices? How and where does a citizen appeal an unreasonable decision? (IFB) *Response*:

Comment: We have difficulty understanding the term "antidegradation" and could not find a clear definition of what the term means. (IFB) Response:

Comment: Does the language regarding antidegradation zero loading of BCCs affect future pesticide applications? (IFB)

Response:

Comment: The language absolutely prohibiting new or increase loadings in specially designated waters is unreasonable and impossible to regulate and sets IDEM up for failure. Some de minimus allowance language is needed. (IFB)

Response:

Comment: The antidegradation program imposes requirements beyond those needed to meet water quality standards. The rules need to be revised to better consider the possible adverse social and economic impacts of these restrictions. (IMA, IWQC, GM, NITRG) Response:

Comment: The proposed requirements for OSRWs amount to a complete prohibition on new discharges and most increases in existing discharges to those waters. Instead, the rules should provide a trigger level for review, so that small discharges are not covered, and should allow dischargers who exceed the trigger level to make a showing of economic or social need. (IMA, IWQC, GM, NITRG)

Response:

Comment: In order to be allowed, any new or increased discharge to OSRWs would have to satisfy the tests that usually apply during antidegradation review and would have to result in a net environmental improvement. If a discharge would not result in a net improvement, it would not be allowed, no matter how small the discharge or how necessary it is to the economic health of the community. This is an arbitrary, draconian prohibition that has no environmental or other justification. No other state that we know of has this type of restriction on discharges. Indiana should not be the first; instead, IDEM should allow facilities to make an antidegradation demonstration. (IMA, IWQC, GM, NIPSCO, NITRG) Response:

Comment: The rules impose an arbitrary two-mile rule for dealing with discharges to tributaries to specially designated waters. Instead, the rules should retain the impact-based test in the interim Great Lakes system antidegradation regulations (327 IAC 5-2-11.7). (IMA, IWQC, GM, NITRG)

Response:

Comment: The proposal contains trigger levels for antidegradation review. While we support that concept, several changes are needed. New discharges to OHSRWs and OSRWs and increased discharges to OSRWs should have trigger levels. For substances with Tier II values, including major cations and anions, a qualitative trigger that considers fate, transport and other factors should be used instead of subjecting dischargers to permit limits even if there is not enough data to set a valid water quality criterion. (IMA, IWQC, GM, NITRG) *Response:*

Comment: Antidegradation review should not be required for pH, whole effluent toxicity, and heat/temperature because the standards are the only valid reference point to use in assessing water impacts with respect to these parameters. (IMA, IWQC, GM, NITRG) *Response:*

Comment: Dischargers should be able to submit a demonstration to justify new or increased discharges of bioaccumulative chemicals of concern (BCCs) to OSRWs. (IMA, IWQC, GM, NITRG)

Response:

Comment: The rules list several types of activities that are exempt from antidegradation review, based on lack of impact or their social/economic value. We support the inclusion of those exemptions, but the following need to be modified or clarified:

- All exemptions should apply to OSRWs.
- All exemptions should apply to BCCs and non-BCCs.
- The exemption for control of nuisance species should be rewritten to delete the requirement that chemicals must not cause adverse effects on aquatic like and wildlife. Adverse effect on a particular aquatic species is the whole purpose of using the chemical.
- The exemption for cleanup actions needs to be modified to remove the requirement that the response action must meet the imminent and substantial endangerment test. IDEM has interpreted this test more narrowly than the federal government, and has required antidegradation review for environmentally beneficial activities.
- The exemption for new sanitary wastewater treatment plants should be changed to not mandate use of ultraviolet disinfection, in order to allow flexibility in choosing disinfection options.

Also, the following exemptions should be added:

- Add an exemption for research and development projects.
- Add an exemption for brownfields and other urban redevelopment projects.

III. Add an exemption for discharges covered by the mercury variance. (IMA, IWQC, GM, NITRG)

Response:

Comment: For discharges that pass the antidegradation review, the proposal imposes severe restrictions on mixing zones, leading to stringent permit limits. These restrictions are unnecessary. If any mixing restrictions are included, there needs to be flexibility to develop different limits depending on the nature of the substance discharged and the nature of the water body. (IMA, IWQC, GM, NITRG) *Response:*

Comment: The economic or social development test for antidegradation review needs to be clarified to state that if IDEM determines that the discharger is applying reasonably available control methods and the action supports important social and economic development in the area, then IDEM should be required to grant the proposed increase. However, a strong role should be provided for local governments to submit long range economic plans or other information that serve as a rebuttable presumption that the development test has been met. (IMA, IWQC, GM, NITRG) *Response:*

Comment: If a discharger is meeting federal technology-based standards, it should not have to make another demonstration regarding control measures in an antidegradation review. (IMA, IWQC, GM, NITRG) *Response:*

Comment: The specific methods for determining whether a requested increase in discharge will result in a significant lowering of water quality should not be applicable to temperature and Lake Michigan criteria or to Tier II values. Whether a requested increase of a Tier II substance would cause a significant lowering should be assessed using narrative provisions with possible scenarios being presented in guidance or non-rule policy. (Indpls)

Response:

Comment: The procedures for determining de minimus levels should be in guidance or non-rule policy instead of the rules until IDEM is confident that the proposed procedures are sound and defensible for every Tier I chemical and every high quality water. (Indpls) *Response:*

Comment: For determining significant lowering of dissolved oxygen, the de minimus level for CBOD₅ should be defined as ten (10) milligrams per liter for high quality waters and five (5) milligrams per liter for other specially designated waters for three reasons. First, IDEM has not presented the basis for how its three (3) milligrams per liter concentration relates to lowering of dissolved oxygen. Second, IDEM is ignoring the assimilative capacity of the water body and is treating CBOD₅ as a conservative substance. Third, three (3) milligrams per liter is not analytically distinctive when CBOD₅ concentrations are greater than five (5) milligrams per liter. (Indpls)

Comment: Ammonia should not be treated as a conservative substance because it is subject to degradation and transformation in natural waters. The kinetics and assimilative capacity of the receiving water needs to be considered when assessing whether a requested increase in ammonia will cause a significant lowering of water quality. (Indpls)

Response:

Comment: Why has IDEM deleted the existing use timeframe of February 17, 1977, in 327 IAC 2-1-2(b)(1)? (IWL)

Response:

Comment: IDEM must protect and maintain all existing uses attained on or after November 28, 1975, and must change the draft accordingly. (IWL) *Response:*

Comment: It is wrong and in violation of the Clean Water Act to abandon existing uses or the designated use of OSRWs, Indiana's equivalent of ONRWs. We are fully aware that IDEM is attempting to lower degradation requirements as they apply to protection and maintenance of Lake Michigan. (IWL) *Response:*

Comment: The draft rule should maintain the simple antidegradation tiers from the existing rules, with Tier 1 applying to all waters, Tier 2 applying to waters of quality higher than the standards which can only be degraded after an antidegradation demonstration and determination, and Tier 3 applying to the highest quality OSRWs and ONRWs which shall be maintained in their present high quality without degradation except for short term temporary actions. (IWL) *Response:*

Comment: Failure to note the repeal of historically designated OSRWs is a serious error neither explained as to necessity nor substituted by equivalent protective language. The draft rule must incorporate all of the existing language in 327 IAC 2-1-2 and guard the existing use of the Blue River, Cedar Creek, Wildcat Creek, the Indiana portion of Lake Michigan, and the Indiana Dunes National Lakeshore. (IWL) *Response:*

Comment: The antidegradation implementation procedures in 327 IAC 2-1-2.1 and 2.2 serve no purpose but confusion because the minimum water quality criteria in 327 IAC 2-1-6 and 6.1 apply to all waters of the state. Also, the elimination of persistent and bioaccumulative pollutants and all toxins is a state policy. These sections should be deleted. (IWL) *Response*:

Comment: The antidegradation exemptions in 327 IAC 2-1-2.3 are unapproved, special interest, inappropriately general, not suitable, and without enough site specific detail to be blanketly accepted. If any of these exemptions have merit, they can be argued in the context of the demonstration and determination. This section should be deleted. (IWL) *Response*:

Comment: 327 IAC 2-1-2.4, the antidegradation demonstration and determination, should be put into 327 IAC 5, the implementation rules. (IWL) *Response:*

Comment: The Tier 2.5 OHSRW designation should be eliminated, restoring all waters listed as OHSRWs to their original OSRW status. OHSRW status does not provide nearly the level of protection as the former OSRW status. As a result, the state has effectively downgraded Lake Michigan by removing protections given OSRWs and permitting the discharge of additional pollution without justification. (LMF) *Response:*

Comment: The bypass exemption in 327 IAC 2-1-2.3(c)(2) should apply to non-BCCs as well as BCCs. (NIPSCO) *Response:*

Comment: Lake Michigan and several other water bodies in the state could be reclassified as OSRWs. The unavailability of the trading exemption in 327 IAC 2-1-2.3(d)(10) for water discharges from required air pollutant control facilities could effect the installation and operation of Selected Catalytic Removal air pollution control devices into OSRWs. This exemption should remain available to OSRWs. (NIPSCO) *Response:*

Comment: IDEM has illegally removed "without degradation" protection for existing OSRWs and exceptional use waters. IDEM has not yet provided a satisfactory reply to questions about the legality under both the Clean Water Act and Indiana law; why IDEM feels that the Water Pollution Control Board did not designate OSRWs with the understanding that they were equivalent to ONRWs; and how it concludes that "significant lowering" is legally equivalent to "without degradation". (SDC) Response:

Comment: The rule language regarding maintenance of surface water quality standards has been changed from a statement of policy on nondegradation for all surface waters, deletes protection of potential uses, and removes the establishment date of February 17, 1977, all without explanation. 327 IAC 2-1-2 now contains IDEM's ever-growing list of tiers of waters with varying standards, instead of the preferred current system of three tiers. (SDC)

Response:

Comment: With the OHSRW designation, IDEM uses the proposed rules to downgrade protection for named waters from the existing protection of "without degradation". In effect, Indiana would be left without any named Tier 3 waters. (SDC) *Response:*

Comment: The antidegradation procedures proposed for OHSRWs and OSRWs include a two-mile upstream restriction on new discharges, while the procedures for ONRWs depart from the two-mile restriction and instead reference discharges that "would cause an increase in the ambient concentration ... in the ONRW." IDEM has not provided water quality justification for either type of restriction. The two-mile language appears to be borrowed from rules or policies concerning controlled discharges to lakes (327 IAC 5-10-3). (SDC)

Response:

Comment: The antidegradation demonstration and implementation procedures provide insufficient protection for Indiana waters by allowing limitations and exceptions to requirements for such demonstrations beyond a very few generally agreed-upon exceptions. Many of these exemptions involve cross-pollutant and cross-media trading, and constitute a huge escape clause for polluters. We also object to removing the requirements for advance notice to the public for certain approved exemptions. In addition, the evaluation of the positive and negative impacts of the proposed increased discharge to the area in which the receiving waters are located is heavy on positive benefits and virtually absent in requiring any meaningful examination of negative impacts. We object to the even more relaxed information requirements for dischargers proposing such actions as voluntary remediation and abatement or correction of any polluted condition. (SDC)

Response:

Comment: The exemptions in 327 IAC 2-1-2.3(c) are inappropriate. (Sierra) *Response:*

Comment: The addition of control of nonpoint source pollution is essential to the restoration of Indiana's waters. (Sierra)

Response:

Comment: It is questionable whether the de minimus increase of one and one half (1.5) and three (3.0) milligrams per liter for CBOD₅ is a sufficiently protective standard threshold. (Sierra)

Response:

Comment: The threshold for triggering increased loadings of ammonia should not be greater than for other pollutants and should not be greater outside than it is inside the Great Lakes system. (Sierra)

Response: